



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/035,620	12/28/2001	Durga P. Satapathy	1474	3860
21396	7590	01/23/2009		
Sprint 6391 SPRINT PARKWAY KSOPHT0101-Z2100 OVERLAND PARK, KS 66251-2100			EXAMINER BEAMER, TEMICA M	
			ART UNIT	PAPER NUMBER
			2617	
			MAIL DATE	DELIVERY MODE
			01/23/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/035,620	Applicant(s) SATAPATHY ET AL.	
	Examiner TEMICA M. BEAMER	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-36,39-50 and 52-66 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-36,39-50 and 52-66 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 9/17/2008 have been fully considered but they are not persuasive. Applicant argues that McConnell fails to disclose the claims as amended. Specifically, the applicant argues that McConnell fails to disclose wherein the access device is configured to receive a first wireline communication, to transmit a second wireline communication, receive a first wireless communication and to transmit a second wireless communication.

The examiner, however, disagrees. As stated in the previous office action, McConnell discloses that the mobile station (MS) (access device) does engage in the wireline communication via the wireline switch (PSTN).

McConnell discloses wherein the MS is connected to an MSC in order to engage in wireless communication. McConnell further discloses wherein the MS is connected to a PSTN for engaging in wireline communication (col. 6, lines 31-43 and col. 12, lines 45-54).

Inherent to the PSTN/wireline system are landline devices which can communicate via wire to other landline devices and mobile devices. Inherently, mobile devices can place a call to landline phone and engage in the wireline communication with the landline device via the connection of the MSC and the PSTN. Further mobile devices can receive calls from landline devices and therefore engage in the wireline communication with the landline device via the PSTN and MSC connections. Such

Art Unit: 2617

connectivity between the mobile devices, landline devices, the MSC and the PSTN is conventional to the telecommunications system (McConnell, col. 12, lines 50-54). This meets the added limitation of the access device receiving and transmitting wireline communication (transmitting wireline communication reads on the access device placing a call to a landline phone) (col. 6, lines 31-43 and col. 12, lines 45-54).

The access device receives and makes calls to wireless devices. This meets the limitation of the access device receiving and transmitting wireless communications (col. 6, lines 31-43; figure 1)

Therefore, the examiner maintains that the mobile station does in fact engage in the transmission and reception of a wireline/wireless communication via the MSC/PSTN connection. The rejections to the claims are set forth below.

Allowable Subject Matter

2. The indicated allowability of claims 7-12, 22, 25, 38, 40, 51-55, 62 and 65 is withdrawn in view of the newly discovered reference(s) to Johnson et al (Johnson), U.S. Patent Pub. No. 2005/0013292. Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 2617

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-6, 13-21, 23, 24, 26-35, 39, 41-50, 56-61, 63, 64 and 66 are rejected under 35 U.S.C. 102(b) as being anticipated by McConnell et al (McConnell), U.S. Patent No. 6,944,150.

Regarding claims 1 and 48, McConnell discloses a system/method for multiple access comprising an access device (12), a wireline switch (22) configured to communicate with the access device using a first wireline communication (figures 1-3) and a second wireless communication (figures 1-3); a wireless switch (20 or 24) configured to communicate with the access device using a first wireless communication and a second wireless communication (figures 1-3); wherein the access device (12) is configured to receive the first wireline communication , to transmit the second wireline communication and to receive the first wireless communication and to transmit the second wireless communication (as explained above) (figures 1-3; col. 6, lines 31-43).

Regarding claim 4, McConnell discloses the system of claim 1 wherein at least one of the first and second wireless communications comprises at least one member of a group consisting of a mulitpoint multichannel distribution service spectrum communication, a code division multiplex access communication, a personal communication service communication, an unlicensed personal communications services spectrum communication, an industrial scientific medical spectrum communication, an unlicensed national information infrastructure spectrum communication, and a satellite service communication (col. 1, lines 38-52).

Regarding claim 5, McConnell discloses the system of claim 1 wherein at least one of the first and second wireline communications comprises at least one member of a group consisting of a digital subscriber line based communication and a hybrid fiber coaxial based communication (col. 2, lines 51-59).

Regarding claim 6, McConnell discloses the system of claim 1 wherein the access device and the wireless switch are not within line of sight (figures 1- 3).

Regarding claim 13, McConnell discloses the system of claim 1 wherein the access device comprises a digital subscriber line modem (col. 2, lines 50-59).

Regarding claim 14, McConnell discloses the system of claim 1 wherein the wireline switch comprises a digital subscriber line access multiplexer (col. 2, lines 50-59).

Regarding claim 15, McConnell discloses the system of claim 1 wherein the wireline switch comprises at least one member of a group comprising a local exchange carrier switch and an interexchange carrier switch (figures 1-3).

Regarding claims 16-19, and 56-59, McConnell discloses the system/method of claims 1 and 48 wherein the access device is configured to process the wireless communication with at least one member of a group comprising encryption, de-encryption, encoding, decoding, multiplexing, de-multiplexing, modulation, and demodulation (inherent to wireless and wireline communications (col. 6, lines 31-43; figures 1-3).

Regarding claims 20 and 60, McConnell discloses the system/method of claims 1 and 48 further comprising a service node configured to communicate with the wireless switch (figures 1-3).

Regarding claims 21 and 61, McConnell discloses the system/method of claims 20 and 60 wherein the service node is configured to communicate with the wireless switch using at least one member of a group comprising a wireless communication and a wireline communication (figures 1-3).

Regarding claims 23 and 63, McConnell discloses the system/method of claims 1 and 48 further comprising a service node configured to communicate with the wireline switch (figures 1-3).

Regarding claims 24 and 64, McConnell discloses the system/method of claims 23 and 63 wherein the service node is configured to communicate with the wireline switch using at least one member of a group comprising a wireless communication and a wireline communication (figures 1-3).

Regarding claims 26 and 66, McConnell discloses the system/method of claims 1 and 48 wherein the wireless communication comprises a first service type communication and the wireline communication comprises a second service type communication (col. 6, lines 31-43).

Regarding claim 27, McConnell discloses a system for multiple access comprising: a wireline switch configured to receive a first set of communications, to format the first set of communications as at least one wireline communication, and to transmit the at least one wireline communication a wireless switch configured to receive

Art Unit: 2617

a second set of communications, to format the second set of communications as at least one wireless communication, and to transmit the at least one wireless communication; and an access device configured to receive the at least one wireline communication and the at least one wireless communication (col. 6, lines 31-43).

Regarding claim 28, McConnell discloses the system of claim 27 wherein the first set of communications are formatted as a plurality of wireline communications, and the wireline switch is configured to transmit the plurality of wireline communications to the access device (col. 6, lines 31-43; figures 1-3).

Regarding claim 29, McConnell discloses the system of claim 27 wherein the wireline switch comprises a digital subscriber line access multiplexer, and the digital subscriber line access multiplexer is configured to multiplex the first set of communications as at least one digital subscriber line wireline communication (col. 2, lines 51-59).

Regarding claim 30, McConnell discloses the system of claim 27 wherein the second set of communications are formatted as a plurality of wireless communications, and the wireless switch is configured to transmit the plurality of wireless communications to the access device (figures 1-3).

Regarding claim 31, McConnell discloses the system of claim 27 further comprising a premises equipment wherein the access device is configured to format the wireless communication to a digital communication and to transmit the digital communication to the premises equipment (col. 6, lines 44-55).

Regarding claim 32, McConnell discloses the system of claim 31 wherein the digital communication comprises voice based data, and the premises equipment is configured to format the digital communication as an analog communication for voice access (col. 6, lines 44-55).

Regarding claim 33, McConnell discloses the system of claim 27 further comprising a premises equipment wherein the wireless communication comprises voice-based data, and the access device is configured to format the wireless communication to an analog communication for voice access and to transmit the analog communication to the premises equipment (col. 6, lines 44-55).

Regarding claim 34, McConnell discloses the system of claim 27 wherein the first set of communications comprises data representative of at least one member of a group comprising voice-based data, internet protocol data, digital data, video data, and media data (col. 6, lines 31-55).

Regarding claim 35, McConnell discloses the system of claim 27 wherein the second set of communications comprises data representative of at least one member of a group comprising voice-based data, internet protocol data, digital data, video data, and media data (col. 6, lines 31-55).

Regarding claim 39, McConnell discloses the system of claim 36 further comprising a multiplexer configured to multiplex at least one member of a group comprising the first data and the second data (col. 6, lines 44-55).

Regarding claim 41, McConnell discloses the system of claim 36 further comprising a modulator configured to modulate data from the premises communication

Art Unit: 2617

for generation of at least one member of a group comprising the wireline communication and the wireless communication (col. 6, lines 44-55).

Regarding claim 42, McConnell discloses the system of claim 36 further comprising a modulator configured to demodulate data from at least one member of a group comprising the wireline communication and the wireless communication for generation of the premises communication (col. 6, lines 44-55).

Regarding claim 43, McConnell discloses the system of claim 36 wherein the access transceiver comprises at least one member of a group comprising a plain old telephone service port, a digital subscriber line port, a hybrid fiber coaxial port, and an antenna (col. 2, lines 39-50).

Regarding claim 44, McConnell discloses the system of claim 36 further comprising a premises equipment comprising at least one member of a group comprising a computer, a telephone, a set top box, and a narrowband device (figures 1-3).

Regarding claim 45, McConnell discloses the system of claim 36 wherein the access transceiver is configured to transmit or receive the wireline communication and the wireless communication (col. 6, lines 31-55).

Regarding claim 46, McConnell discloses the system of claim 36 wherein the medium access control layer further is configured to control a resource for combining first data from the wireline communication and second data from the wireless communication to another communication (col. 6, lines 44-55).

Art Unit: 2617

Regarding claim 47, McConnell discloses the system of claim 36 wherein the service hub is configured to transmit or receive the premises communication (figures 1-3).

Regarding claim 49, McConnell discloses the method of claims 48 wherein the access device is configured to receive the wireless communication from the wireless switch and to receive the wireline communication from the wireline switch (col. 6, lines 31-43; figures 1-3).

Regarding claim 50, McConnell discloses the method of claim 48 wherein the access device is configured to transmit the wireless communication to the wireless switch and to transmit the wireline communication to the wireline switch (col. 6, lines 31-43; figures 1-3).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 7-12, 22, 25, 36, 40, 52-55, 62 and 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over McConnell in view of Johnson et al (Johnson), U.S. Patent Pub. No. 2005/0013292.

Regarding claims 7-9, 11, 22, 25, 40, 52, 54, 62 and 65, McConnell discloses the system/method of the claims upon which they depend as described above. McConnell,

Art Unit: 2617

however, fails to disclose using an inverse multiplex ATM protocol on the wireless and wireline communication.

In a similar field of endeavor, Johnson discloses this limitation (0026 regarding wireless/wireline links 20, 0055, 0056)

At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify McConnel with the teachings of Johnson since such multiplexing is a well-known technique in the art for increasing transmission capacity.

Regarding claim 36, McConnell discloses a system for multiple access comprising: an access transceiver configured to communicate using a wireline communication and a wireless communication; a medium access control layer configured to control access to the access transceiver for communicating the wireline communication and the wireless communication (figures 1- 3); and a service hub configured to communicate first data for the wireline communication and second data for the wireless communication for at least one premises communication (col. 6, lines 31-67; figures 1-3).

McConnell, however, fails to disclose using an inverse multiplex ATM protocol on the wireless and wireline communication.

In a similar field of endeavor, Johnson discloses this limitation (0026 regarding wireless/wireline links 20, 0055, 0056)

At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify McConnel with the teachings of Johnson since such multiplexing is a well-known technique in the art for increasing transmission capacity.

Regarding claims 10, 12, 53 and 55, the combination of McConnell and Johnson discloses the system/method of the claims upon which they depend and further discloses customer premise equipment configured to receive the premises communication (data) from the access device (McConnell, col. 2, lines 38-50).

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to TEMICA M. BEAMER whose telephone number is (571)272-7797. The examiner can normally be reached on Monday-Thursday (alternate Fridays) 9:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on (571) 272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/035,620
Art Unit: 2617

Page 13

/Temica M. Beamer/
Primary Examiner, Art Unit 2617